



Feed the Future Country Fact Sheet

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Disease-Resistant Cassava Increases Yields and Builds Resilience in Kenya

"The last time I harvested big cassava roots was in August 1996," says Mary Juma, a smallholder farmer from Busia, located in Western Kenya. "I could get 12 kilograms of the tuber from just one plant and feed my family for days!"

These days, Juma's plants rarely produce more than one kilogram of tubers due to the invasion of Cassava Mosaic Virus (CMV), a disease resulting in stunted tubers and plants with deformed leaves bearing a yellow "mosaic" pattern.

Sarah Makhilo, another smallholder farmer, says cassava was once a favorite crop in Busia, particularly because maize does not perform well in their climate. This, coupled with the CMV invasion, has significantly impacted food security in Western Kenya. One of the many downsides has been a decrease in women's economic empowerment in the region.

"Selling cassava used to be one of our main economic activities," Makhilo says. The sharp decline in cassava yields means that women like Sarah have fewer avenues to earn money and feed their families.

The good news is that agricultural researchers have developed new cassava varieties that are resistant to CMV. However, rural smallholder farmers like Juma and Makhilo rarely have access to or knowledge of these kinds of technologies and improved varieties. In Kenya, Feed the Future is working to close this gap by supporting local NGOs in their efforts to bring critical farming technologies to smallholders.

One example of this work is Feed the Future's partnership with [Farm Input Promotions - Africa](#), a nonprofit company committed to improving the crop productivity of small-scale farmers in Sub-Saharan Africa through technology dissemination. Through a five-year project under Feed the Future, the company helps smallholder farmers access improved varieties of crops, increase their use of fertilizer, and learn improved soil and water management techniques.

Farm Input Promotions also trains village-based advisors in food-insecure regions of Kenya to pass on information and skills to their fellow farmers. Among their other activities, these advisors are establishing multiplication sites for disease-resistant cassava in their own villages. Advisors can either keep or sell the tubers they harvest, and are expected to distribute the cuttings to other farmers in return.

For example, from a quarter-acre site, a village-based advisor can harvest 16,000 cuttings after one year of cultivation. If they give 50 cuttings to each farmer, they can reach 320 households in their village. This innovative approach is a quick, cost-effective and sustainable way to improve the yields, livelihoods, and resilience of thousands of smallholder farmers. Between March and June 2012 alone, village-based advisors in Western Kenya established 1,466 multiplication sites for new varieties of cassava that are resistant to CMV.

Concilia Anyango, an advisor based in Siranga village in Ugenya, has set up a multiplication site and already distributed her first batch of cassava cuttings to 250 farmers. In eight months' time, Anyango expects to disseminate improved cassava cuttings from her multiplication site to another 300 farmers in her region.

"I am happy because I will harvest so much cassava, I will eat and sell some of it at the local market," Anyango says. "But what really matters to me is that I am already an agent of change in my village."